3

99-377/009774 (BOE 0274 PA)

In the Claims:

Please amend the claims as follows:

- (Amended) An iris, comprising:
- a stator assembly comprising a frame coupled to an electrically wound substantially annular magnetic core;
- a rotor rotatably coupled to said substantially annular magnetic core and defining a channel, said rotor comprising an annular member comprising an upper surface and a lower surface and a common edge, said rotor further comprising a plurality of magnets coupled to said upper surface, said annular member defining at least one opening in said lower surface; and
- a diaphragm coupled to said stator assembly comprising a plurality of diaphragm leaves pivotally arranged to form an adjustable aperture substantially concentric with said channel; a first portion of at least one of said plurality of diaphragm leaves extending from said diaphragm and coupled to said stator, a second portion of another of said plurality of diaphragm leaves extending from said diaphragm and coupled to said rotor such that said second portion fits within said at least one opening.
- 2. (Original) The iris of claim 1 further comprising a body coupled to said stator assembly.
- 3. (Original) The iris of claim 2 further comprising a sensor coupled to said body for detecting aperture diameter data.
- 4. (Original) The iris of claim 3 further comprising an actuator coupled to said body, said actuator adapted to provide electrical current

4

99-377/009774 (BOE 0274 PA)

through windings on said electrically wound magnetic core such that said rotor rotates in response to said electrical current.

- 5. (Original) The iris of claim 4 further comprising a controller coupled to said body adapted to receive data from said sensor, said controller containing logic designed to activate said actuator in response to said data.
 - 6-8 (Cancelled)
 - 9. (Amended) An iris system comprising:
- a first annular member comprising a first frame coupled to a first magnetic core, said first frame comprising a sidewall, a first annular element circumjacent at one end of said sidewall, a second annular element circumjacent at another end of said sidewall, said first annular element having a first opening, said second annular element having a second opening such that a first channel is defined through said first frame;
- a second annular member comprising a second frame coupled to a second magnetic core juxtaposing said first magnetic core, said second annular member rotatably coupled to said first annular member such that a second channel is defined substantially concentric with said first channel, said second annular member further comprising an annular member comprising an upper surface and a lower surface and a common edge, wherein said second magnetic core is coupled to said upper surface and at least one opening is defined in said lower surface; and
- a plurality of leaves adapted to rotate to form an adjustable aperture substantially concentric with said first channel, a first portion of a first leaf of

5

99-377/009774 (BOE 0274 PA)

said plurality of leaves extending from said plurality of leaves and rotatably coupled to said first annular element of said first annular member, a second portion of a second leaf of said plurality of leaves extending from said plurality of leaves and rotatably coupled to said second annular member such that said second portion fits within said at least one opening.

- 10. (Original) The iris of claim 9 further comprising a body coupled to said first annular member.
- 11. (Original) The iris of claim 10 further comprising a sensor coupled to said body for detecting aperture diameter data.
- 12. (Original) The iris of claim 11 further comprising an actuator coupled to said body, said actuator adapted to send electrical current through windings on said first magnetic core such that said second annular member rotates in response to said electrical current.
- 13. (Original) The iris of claim 12 further comprising a controller coupled to said body adapted to receive data from said sensor, said controller containing logic designed to activate said actuator in response to said data.
 - 14-16 (Cancelled)
- 17. (Original) The system of claim 9 wherein said first magnetic core is coupled to said sidewall.
- 18. (Original) The system of claim 9 wherein said first magnetic core is coupled to said second annular element.
 - 19. (Amended) An iris system, comprising: a body;

a stator assembly, coupled to said body, comprising a frame coupled to an electrically wound substantially annular magnetic core;

a rotor rotatably coupled to said substantially annular magnetic core, such that a channel is defined, said rotor comprising an annular member comprising an upper surface and a lower surface and a common edge, said rotor further comprising a plurality of magnets coupled to said upper surface, said annular member defining at least one opening in said lower surface;

a diaphragm coupled to said stator assembly comprising a plurality of diaphragm leaves pivotally arranged to form an adjustable aperture substantially concentric with said channel; a first portion of at least one of said plurality of diaphragm leaves extending from said diaphragm and coupled to said stator, a second portion of another of said plurality of diaphragm leaves extending from said diaphragm and coupled to said rotor such that said second portion fits within said at least one opening;

a sensor coupled to said body for detecting aperture diameter data;

an actuator coupled to said body, said actuator adapted to provide electrical current through windings on said electrically wound magnetic core such that said rotor rotates in response to said electrical current; and

a controller coupled to said body and adapted to receive data from said sensor, said controller containing logic adapted to activate said actuator in response to said data.

20. (Original) The iris of claim 19 wherein said body comprises a telescope.

7

99-377/009774 (BOE 0274 PA)

21. (Original) The iris of claim 19 wherein said body comprises a

camera.

22. (Original) The iris of claim 19 wherein said body comprises a

pipe.